

REMARKS/ARGUMENTS

Entry of the above amendment is respectfully requested. Claim 1 has been amended to clarify the invention. Claims 2 and 15 have been canceled. Claims 3 and 10 have been amended to correct typographical errors. Claims 1, 3 – 14, and 16 – 20 are now pending. Favorable reconsideration and allowance of this application is respectfully requested in light of the remarks that follow.

Section 103 Rejection

Claims 1 – 3 and 10 have been rejected under 35 U.S.C. Section 103(a) as unpatentable over Yoshioka in view of Pohan. Claims 7, 8, and 16 – 20 were rejected over Yoshioka in view of Pohan, Design Guide, Ferrotec, and Snyder. The remaining claims have been rejected based on Yoshioka in view of Pohan and various other references. Reconsideration of the claims based on the following remarks is respectfully requested.

Each of the independent claims 1, 10, and 16, and the associated dependent claims, have been rejected based on the Yoshioka and Pohan, in combination with various other references. In the Office Action, it is asserted that it would have been obvious to change at least one of the outlying heaters of Yoshioka to thermoelectric coolers, along with the appropriate controller modifications, to enable cooling of the detector array when ambient temperatures are too high. The Applicants respectfully disagree that there is any motivation to combine these references.

Yoshioka discloses an x-ray tomographic image detector which is divided into a number of separate regions each including heating elements and temperature sensing

means. As shown in Fig. 1, the detector includes three sections having three heaters H1, H2, and H3. H1 and H2 are provided at opposing ends of the array and the heater H3 is provided in the center section, such that heating elements are extended across the array. Each of the heated portions include sensors S1, S2, and S3 which are monitored by temperature control circuits 11a – 11c.

Yoshioka discloses a device in which the entire array includes heating elements. These elements are dispersed through the entire device and are therefore clearly intended to raise the temperature of the device, throughout the device. Yoshioka neither teaches nor suggests that it is advantageous to include cooling in the system. Again, as the entire object of the invention is to heat the array, Yoshioka teaches away from adding cooling elements.

Pohan discloses a sensor including at least one heating element for heating the sensor array. Pohan discloses that the heating element can be a resistance element or a Peltier element, and indicates that it is possible to cool the sensor array and regulating electronics if Peltier elements are used instead of resistance elements. Pohan, therefore, suggests either heating or cooling the array. Pohan does not disclose or suggest both cooling and heating the array in order to maintain the array at a selected temperature, as recited in the claims.

In the Office Action it is suggested that it would be obvious to combine Yoshioka and Pohan “to enable cooling of the detector array when ambient temperatures are too high” as taught by Pohan. The present invention, however, does not use the thermoelectric cooler to cool the array when ambient temperatures are too high. Rather, it cools some parts of the array and heats other parts of the array to maintain a selected

temperature. Neither of the cited references suggest combining both heating and cooling elements to selectively heat and cool parts of an array.

The remaining references cited are provided merely to provide the limitations of the claims not found in Yoshioka or Pohan. These additional references do not rectify any of the problems noted above with the combination of Yoshioka and Pohan. Furthermore, none of these proposed combinations is supported by a citation in any reference suggesting the combination. It appears, therefore, that each of these combinations are motivated purely by Applicants' disclosure.

In view of the foregoing remarks, the Applicants submit that it is not obvious to combine Yoshioka and Pohan, and the Applicants respectfully request that the rejection of claims 1, 3 – 14, and 16 – 20 as combinations of Yoshioka and Pohan with other references be withdrawn.

Additionally, claims 5- 8, 12, 13, and 16 – 20 were rejected based at least in part on the Design Guide and Ferrotec documents. In response, the Applicants submit that the Design Guide and Ferrotec documents are not prior art references because it has not been proven that the documents are printed publications. See MPEP § 2128. The Design Guide document contains a revision date but it has not been established that the document has been disseminated or otherwise made available to the extent that persons interested and ordinarily skilled in the subject matter or art, exercising reasonable diligence, can locate it. The Ferrotec document contains no publication date. Therefore, the Design Guide and Ferrotec documents cannot be used to preclude patentability. Accordingly, applicants submit that claims 5 – 8, 12, 13, and 16 – 20 cannot be obvious in view of the

cited combinations and respectfully request that the rejection of the claims 5 – 8, 12, 13, and 16 – 20 be withdrawn.

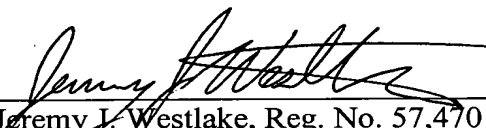
Conclusion

In view of the fact that the combination of Yoshioko and Pohan is not obvious and that the claims, as amended, are therefore in condition for allowance. The Applicants respectfully request that a notice of allowance for claims 1, 3 – 14, and 16 – 20 be issued.

The Commissioner is authorized to charge any fees under 37 CFR § 1.17 that may be due on this application to Deposit Account 17-0055. The Commissioner is also authorized to treat this amendment and any future reply in this matter requiring a petition for an extension of time as incorporating a petition for extension of time for the appropriate length of time as provided by 37 CFR § 136(a)(3).

Respectfully submitted,

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